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Quantifying the costs of drought: New evidence from life satisfaction data

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Abstract:

We estimate the cost of droughts by matching rainfall data with individual life satisfaction. Our context is Australia over the period 2001 to 2004, which included a particularly severe drought. Using fixed-effect models, we find that a drought in spring has a detrimental effect on life satisfaction equivalent to an annual reduction in income of A\$18,000. This effect, however, is only found for individuals living in rural areas. Using our estimates, we calculate that the predicted doubling of the frequency of spring droughts will lead to the equivalent loss in life satisfaction of just over 1% of GDP annually.

Source: http://dx.doi.org/10.1007/s00148-007-0174-3

Resource Description

Exposure: M

weather or climate related pathway by which climate change affects health

Extreme Weather Event, Precipitation

Extreme Weather Event: Drought

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified, Rural, Urban

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Australasia

Health Impact: M

specification of health effect or disease related to climate change exposure

Mental Health/Stress

Mental Health Effect/Stress: Stress Disorder

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mitigation or adaptation strategy is a focus of resource

Adaptation

Model/Methodology: **☑**

type of model used or methodology development is a focus of resource

Cost/Economic

Population of Concern: A focus of content

Population of Concern: M

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

Resource Type: **☑**

format or standard characteristic of resource

Research Article

Timescale: M

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: **☑**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content